



SNS COLLEGE OF TECHNOLOGY
Coimbatore-35.



(An Autonomous Institution)

DEPARTMENT OF MATHEMATICS

23MAT601-Applied Statistics for Data Analysis

UNIT - II QUANTITATIVE STATISTICAL MEASURES

Part B

1. The Wages of 1060 employees range from Rs 300 to Rs 450. They are grouped in 15 classes with a common class interval of Rs.10 class frequencies from lowest to highest are 6,17,35,48,65,90,131,173,155,177,75,52,21,9,6. Tabulate the data and compute the mean wage.

2. Given below is the distribution of Profits (in Rupees) earned by 94 book depots in a certain territory. Compute the modal value.

Pro fits bel ow	20	30	40	50	60	70	80	90
f	5	14	27	48	68	83	91	94

3. The following is the distribution of the size of certain farms selected at random from a district. If mid value is given Compute the median from the following data

Mid Values	11 5	125	135	145	155	16 5	175	185	195
Frequenc y	6	25	48	72	116	60	38	22	3

4. The following distributions represents the number minutes spent by a group of teenagers in going to movies. Discover the mode from the following data

x	25	30	35	40	45	50	55
f	7	11	17	15	14	10	11

5. Twenty percent of the workers in a firm employing a total of 2,000 earn less than Rs 2 per hour, 440 earn from Rs 2 to 2.24 per hour, 24% earn from 2.25 to 2.49 per hour, 370 earn from Rs 2.50 to 2.74 per hour, 12% earn from Rs 2.75 to 2.99 per hour and the rest earn Rs 3 or more per hour. Set up a frequency table and Calculate modal wage.
6. There are two branches of an establishment employing 100 and 80 persons respectively. If the arithmetic means of the monthly salaries paid by the two branches are Rs 275 and Rs 225 respectively, find the arithmetic mean of the salaries of the employees of the establishment as a whole.

7. An incomplete frequency distribution is given as follows:

CI	0-5	5-10	10-15	15-20	20-25
Frequency	3	F	8	5	4

Given that the mean value is 12.9, determine the missing frequency

8. The following details were collected during the checkup of 35 students from a class.

Weight (in Kg)	38-40	40-42	42-44	44-46	46-48	48-50	50-52
No of Students	3	2	4	5	14	4	3

- (i) Find the median class and median of the given data
(ii) Determine the mean

Compute the modal class

9. The mean height of 25 male workers in a factory is 61 cm and the mean height of 35 female workers in the same factory is 58 cm. Find the combined mean height of 60 workers in the factory.

10. The following marks were collected during the test in a class

Marks	10- 20	20- 30	30- 40	40- 50	50- 60	60- 70	70- 80
No of Students	7	10	10	20	20	15	8

- (i) Find the median class and median of the given data
(ii) Determine the mean

Compute the modal class.